

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An apparatus for measuring fuel amount contained in a fuel tank of a vehicle, comprising:

transmission lines provided within said fuel tank and being supplied with a high-frequency wave;

a measuring [unit] circuit for measuring an amplitude of a reflective wave [or capacitance voltage in said transmission lines that varies in accordance with a depth of said fuel, said transmission lines being supplied with a high-frequency wave] of the high-frequency wave on said transmission lines, said amplitude being varied in accordance with an impedance of the transmission lines,

wherein said impedance varies in accordance with a fuel amount contained in said fuel tank.

2. (original) The apparatus of claim 1, wherein said measuring unit comprises a housing, a circuit substrate including a measuring circuit, said circuit substrate being provided within said housing, said apparatus further comprising a sealing member in a connecting portion between said transmission lines and said measuring unit.

3. (original) The apparatus of claim 1, wherein said measuring circuit comprises a high-frequency generating module for generating a signal applied to said

transmission lines; a reflective wave detecting module for detecting a reflective signal in said transmission lines, and for calculating a reflective coefficient by comparing the reflective signal with the signal from said high-frequency generating module and for calculating a depth of said fuel; an amplifier for amplifying the output signal from said reflective wave detecting module; and a connector for transmitting said amplified signal to an instrument panel of said vehicle.

4. (canceled)

5. (original) The apparatus of claim 1, wherein a load resistor is provided at the ends of said transmission lines, said transmission lines being provided within a pipe member made of nonconductor, said pipe member having an open end and being provided with said fuel therein.

6. (original) The apparatus of claim 5, wherein said transmission lines and said load resistor are sealed with a nonconductor.

7. (original) The apparatus of claim 1, wherein said transmission lines are selected from a group of high-frequency transmission lines consisting of a pair of transmission lines, a strip coplanar waveguide, a coplanar strip, and a coaxial cable.

8. (canceled)

9. (canceled)